

520 Rec'd PCT/PTO 24 JAN 2000

FORM PTO-1390 REV. 5-93		US DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTORNEYS DOCKET NUMBER P00,0103
<b>TRANSMITTAL LETTER TO THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US) CONCERNING A FILING UNDER 35 U.S.C. 371</b>			U.S. APPLICATION NO. (if known, see 37 CFR 1.5) <b>09/463271</b>
INTERNATIONAL APPLICATION NO. PCT/DE98/01254	INTERNATIONAL FILING DATE 05 May 1998	PRIORITY DATE CLAIMED 23 July 1997	
TITLE OF INVENTION "METHOD FOR STORING SEARCH FEATURES OF AN IMAGE SEQUENCE" (as amended)			
APPLICANT(S) FOR DO/EO/US Andre Kaup			
Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:			
<p>1. <input checked="" type="checkbox"/> This is a <b>FIRST</b> submission of items concerning a filing under 35 U.S.C. 371.</p> <p>2. <input type="checkbox"/> This is a <b>SECOND</b> or <b>SUBSEQUENT</b> submission of items concerning a filing under 35 U.S.C. 371.</p> <p>3. <input checked="" type="checkbox"/> This express request to begin national examination procedures (35 U.S.C. 371(f)) at any time rather than delay.</p> <p>4. <input checked="" type="checkbox"/> A proper Demand for International Preliminary Examination was made by the 19th month from the earliest claimed priority date.</p> <p>5. <input checked="" type="checkbox"/> A copy of International Application as filed (35 U.S.C. 371(c)(2))</p> <p>6. <input type="checkbox"/> <input checked="" type="checkbox"/> is transmitted herewith (required only if not transmitted by the International Bureau).</p> <p>7. <input type="checkbox"/> has been transmitted by the International Bureau.</p> <p>8. <input type="checkbox"/> is not required, as the application was filed in the United States Receiving Office (RO/US)</p> <p>9. <input checked="" type="checkbox"/> A translation of the International Application into English (35 U.S.C. 371(c)(2)).</p> <p>10. <input checked="" type="checkbox"/> Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3))</p> <p>11. <input type="checkbox"/> <input type="checkbox"/> are transmitted herewith (required only if not transmitted by the International Bureau).</p> <p>12. <input type="checkbox"/> have been transmitted by the International Bureau.</p> <p>13. <input type="checkbox"/> have not been made; however, the time limit for making such amendments has NOT expired.</p> <p>14. <input type="checkbox"/> have not been made and will not be made.</p> <p>15. <input type="checkbox"/> A translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)).</p> <p>16. <input type="checkbox"/> An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)). <b>Executed</b></p> <p>17. <input type="checkbox"/> A translation of the annexes to the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)).</p> <p>Items 11. to 16. below concern other document(s) or information included:</p> <p>18. <input type="checkbox"/> An Information Disclosure Statement under 37 C.F.R. 1.97 and 1.98; (PTO 1449, Prior Art, Search Report).</p> <p>19. <input checked="" type="checkbox"/> An assignment document for recording. A separate cover sheet in compliance with 37 C.F.R. 3.28 and 3.31 is included. (See attached envelope)</p> <p>20. <input checked="" type="checkbox"/> A FIRST preliminary amendment.</p> <p>21. <input type="checkbox"/> A SECOND or SUBSEQUENT preliminary amendment.</p> <p>22. <input type="checkbox"/> A substitute specification.</p> <p>23. <input type="checkbox"/> A change of power of attorney and/or address letter.</p> <p>24. <input checked="" type="checkbox"/> Other items or information:</p> <p>a. Request for Approval of Drawing Changes (3 sheets) (Figs. 1, 2 and 3)</p> <p>b. Submission of Drawings (3 sheets) (Figs. 1, 2a-d and 3)</p> <p>c. EXPRESS MAIL NO.: EL428567636US dated Jan. 24, 2000.</p>			

09/463271

## 17. ■ The following fees are submitted:

**BASIC NATIONAL FEE (37 C.F.R. 1.492(a)(1)-(5):**

Search Report has been prepared by the EPO or JPO ..... \$840.00

International preliminary examination fee paid to USPTO (37 C.F.R. 1.482) . . . \$670.00

No international preliminary examination fee paid to USPTO (37 C.F.R. 1.482) but  
international search fee paid to USPTO (37 C.F.R. 1.445(a)(2) ..... \$760.00Neither international preliminary examination fee (37 C.F.R. 1.482) nor international  
search fee (37 C.F.R. 1.445(a)(2) paid to USPTO ..... \$970.00International preliminary examination fee paid to USPTO (37 C.F.R. 1.482) and all  
claims satisfied provisions of PCT Article 33(2)-(4) ..... \$ 96.00**ENTER APPROPRIATE BASIC FEE AMOUNT =**

CALCULATIONS

PTO USE ONLY

\$840.00

Surcharge of \$130.00 for furnishing the oath or declaration later than ☐ 20 ☐ 30 months  
from the earliest claimed priority date (37 C.F.R. 1.492(e)).

\$

Claims

Number Filed

Number  
Extra

Rate

Total Claims

10

- 20 =

0

X \$ 18.00

\$

Independent Claims

1

- 3 =

0

X \$ 78.00

\$

Multiple Dependent Claims

\$260.00 +

\$

**TOTAL OF ABOVE CALCULATIONS =**

\$840.00

Reduction by 1/2 for filing by small entity, if applicable. Verified Small Entity statement must  
also be filed. (Note 37 C.F.R. 1.9, 1.27, 1.28)

\$

**SUBTOTAL =**

\$

Processing fee of \$130.00 for furnishing the English translation later than ☐ 20 ☐ 30 months  
from the earliest claimed priority date (37 CFR 1.492(f)).

+

**TOTAL NATIONAL FEE =**

\$840.00

Fee for recording the enclosed assignment (37 C.F.R. 1.21(h). The assignment must be  
accompanied by an appropriate cover sheet (37 C.F.R. 3.28, 3.31). \$40.00 per property

+

**TOTAL FEES ENCLOSED =**

\$840.00

Amount to be  
refunded

\$

charged

\$

a. ■ A check in the amount of \$ 840.00 to cover the above fees is enclosed.b. □ Please charge my Deposit Account No. \_\_\_\_\_ in the amount of \$ \_\_\_\_\_ to cover the above fees.  
A duplicate copy of this sheet is enclosed.c. ■ The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any  
overpayment to Deposit Account No. 08-2290. A duplicate copy of this sheet is enclosed.NOTE: Where an appropriate time limit under 37 C.F.R. 1.494 or 1.495 has not been met, a petition to revive (37 C.F.R. 1.137(a) or (b)) must be  
filed and granted to restore the application to pending status.

SEND ALL CORRESPONDENCE TO:

SIGNATURE

Hill &amp; Simpson

A Professional Corporation

85th Floor Sears Tower

Chicago, Illinois 60606

Steven H. Noll

NAME

28,982

Registration Number

09/463271  
428 Rec'd PCT/PTO 24 JAN 2000

CERTIFICATE OF MAILING BY "EXPRESS MAIL"

Express Mail" Mailing Label Number: EL 428567636US

Date of Deposit: January 24, 2000

I hereby certify that this correspondence is being deposited with the United States Postal "Express Mail Post Office to Addressee" service under 37 CFR 1.10 on the date indicated above and is addressed to

BOX PCT  
Assistant Commissioner for Patents  
Washington, D.C. 20231

Case Number: P00,0103

Applicant: Andre Kaup

International Application No. PCT/DE98/01254  
International Filing Date 05 May 1998  
Priority Date Claimed 23 July 1997

Title: "METHOD FOR STORING SEARCH FEATURES OF AN IMAGE SENSOR"  
(title as amended)

Enclosed are the following documents:

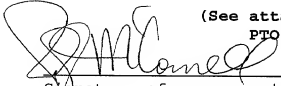
International Application as filed, drawings attached;  
English translation, drawings attached;

Executed Declaration;  
PTO 1390 in duplicate;  
Preliminary Amendment "A";  
Submission of Drawings, 3 sheets (FIGS.1, 2a-d and 3:  
Request for Approval of Drawing Changes. (3 sheets) Figs 1, 2 & 3)

Fee: \$840.00

Postcard.

(See attached envelope for Executed Assignment  
PTO 1595; \$40.00 filing fee; Postcard)

  
\_\_\_\_\_  
Signature of person mailing documents and fees

00463271-012400

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BOX PCT

IN THE UNITED STATES DESIGNATED/ELECTED OFFICE  
OF THE UNITED STATES PATENT AND TRADEMARK OFFICE  
UNDER THE PATENT COOPERATION TREATY-CHAPTER II

5

**PRELIMINARY AMENDMENT "A"**

APPLICANT(S): Andre Kaup  
ATTORNEY DOCKET NO.: P00,0103  
INTERNATIONAL APPLICATION NO.: PCT/DE98/01254  
INTERNATIONAL FILING DATE: 05 May 1998

10

INVENTION: "METHOD FOR STORING SEARCH FEATURES OF  
AN IMAGE SEQUENCE"

Assistant Commissioner for Patents  
Washington, D.C. 20231

Sir:

15

Applicants herewith amend the above-referenced PCT application,  
and request entry of the Amendment prior to examination on the United  
States National Examination Phase.

**IN THE SPECIFICATION:**

20

On page 1, cancel the title above line 4, and insert the following  
text and amended title above line 4:

**--TITLE**

**METHOD FOR STORING SEARCH FEATURES OF AN IMAGE  
SEQUENCE**

**BACKGROUND OF THE INVENTION--;**

25

in line 4, after "The" insert --present--;

in line 14, cancel "image sequence" substitute --image sequence--  
therefor;

in line 15, cancel "image scene" substitute --image scene-- therefor;

30

in line 16, cancel "intraimage" substitute --intra-image-- therefor,  
and cancel ", respectively";

below line 16, insert a centered heading:

**--SUMMARY OF THE INVENTION--**

in line 18, cancel "The object of the invention is to set forth"

substitute --It is an object of the present invention to provide--  
- therefor;

cancel line 22, substitute the following at line 22:

--This object is achieved in accordance with the present invention in  
a method for storing search features of an image sequence,  
the method comprising the steps of: determining the search  
features from the image sequence; and storing the features  
together with the image sequence.--;

in line 24, after "The" insert --present--.

On page 2, in line 1, cancel "A development of the invention  
consists in" substitute --In an embodiment,-- therefor, and  
cancel "being" substitute --are-- therefor;

in line 4, cancel "Another development consists in the ability to  
access" substitute --In an embodiment,-- therefor;

in line 5, after "sequence" insert --can be accessed--;

in line 13, cancel "In a further development" substitute --In an  
embodiment-- therefor;

in line 15, cancel "intraimage" substitute --intra-image-- therefor;

in line 17, cancel "intraimage" substitute --intra-image-- therefor;

in line 20, cancel "Another development consists in storing"  
substitute --In an embodiment,-- therefor, and after "scene"  
insert --is stored--, and after "database" insert a comma;

in line 21, cancel "and";

in line 23, cancel "An additional development consists in storing"  
substitute --In an embodiment,-- therefor, and after "features"  
insert --are stored--;

in line 25, cancel ", respectively";

cancel line 28, substitute the following at line 28:

--In an embodiment, the search features are unambiguously identified using--.

On page 3, cancel lines 8-19, substitute the following at line 8:

- 5     --     These and other features of the invention(s) will become clearer with reference to the following detailed description of the presently preferred embodiments and accompanied drawings.

**DESCRIPTION OF THE DRAWINGS**

10     Figure 1 is a block diagram illustrating a method for storing search features of an image sequence and illustrating an accessing of the image sequence with the aid of the search features in accordance with the present invention.

Figure 2 is a block diagram showing various possibilities for the common storing of search features with the image sequence.

15     Figure 3 is a block diagram illustrating the search features and pertaining references that reference the image data.

**DETAILED DESCRIPTION OF THE PRESENTLY PREFERRED EMBODIMENTS--.**

20     On page 4, in line 1, cancel "was found [sic]" substitute --is found-- therefor.

On page 5, in line 6, cancel "that is possible", and cancel ", respectively";

in line 7, after "M32" insert --are supplemented--, and cancel "02 are" substitute --02.-- therefor;

25     in line 8, cancel "supplemented. [sic]", and cancel "contain" substitute --contains-- therefor;

in line 12, after "features" insert a comma;

in line 14, after "02" insert a comma;

in line 27, cancel "[sic]".

On page 6, below line 2, insert the following paragraph:

-- Although modifications and changes may be suggested by those of ordinary skill in the art, it is the intention of the inventors to embody within the patent warranted hereon all changes and modifications as reasonably and properly come within the scope of their contribution to the art.--.

**IN THE CLAIMS:**

On page 7, in line 1, cancel "Patent Claims" substitute --**I CLAIM AS MY INVENTION**-- therefor.

Please cancel claims 1-10 and substitute the following claims 11-20 therefor:

11. A method for storing search features of an image sequence, said method comprising the steps of:  
determining said search features from said image sequence; and  
storing said features together with said image sequence.

12. The method as claimed in claim 11, wherein said search features are at least one of audio data and video data of said image sequence.

13. The method as claimed in claim 11, wherein said search features comprise a reference to an image within said image sequence for assisting in accessing said image within said image sequence.

14. The method as claimed in claim 11, wherein said search features are stored as a prefix to said image sequence.

15. The method as claimed in claim 11, wherein said search features are stored appended to said image sequence.

16. The method as claimed in claim 11, wherein said search features are stored in said image sequence.

17. The method as claimed in claim 16, wherein search features for an image scene of said image sequence, said image scene being  
5 initiated by an intra-image defined according to the MPEG standard, are stored as a prefix to said intra-image.

18. The method as claimed in claim 17, wherein each image scene of said image sequence is stored in a database.

19. The method as claimed in claim 11, wherein separate search  
10 features for several object that are contained in said image sequence according to image coding standards are respectively stored together with said image sequence.

20. The method as claimed in claim 11, wherein said search features can be unambiguously identified by a predeterminable start code.



**IN THE ABSTRACT:**

On page 9, cancel lines 1-3, insert the following centered heading at line 1:

**--ABSTRACT OF THE DISCLOSURE--;**

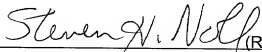
5 in line 8, cancel "[...]", and after "or" insert --stored--;  
cancel line 12.

**REMARKS:**

10 The present Amendment revises the specification, drawings and  
claims to conform to United States patent practice, before examination of  
the present PCT application in the United States National Examination  
Phase. All of the changes are editorial and no new matter is added  
thereby. The cancellation of claims 1-10, in favor of new claims 11-20,  
15 has been made solely for convenience, since the amount of bracketing  
and underlining necessary to editorially amend claims 1-10 in order to  
conform to United States patent practice would have been excessive and  
burdensome. The cancellation of claims 1-10 is therefore not intended to  
be a surrender of any of the subject matter of those claims.

Early examination on the merits is respectfully requested.

Respectfully submitted,

20  (Reg. No. 28,982)

25 Steven H. Noll  
Hill & Simpson  
A Professional Corporation  
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Attorneys for Applicant(s)

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BOX PCT  
IN THE UNITED STATES DESIGNATED/ELECTED OFFICE  
OF THE UNITED STATES PATENT AND TRADEMARK OFFICE  
UNDER THE PATENT COOPERATION TREATY-CHAPTER II

**REQUEST FOR APPROVAL OF DRAWING CHANGES**

APPLICANT(S): Andre Kaup  
ATTORNEY DOCKET NO.: P00,0103  
INTERNATIONAL APPLICATION NO.: PCT/DE98/01254  
INTERNATIONAL FILING DATE: 05 May 1998  
INVENTION: "METHOD FOR STORING SEARCH FEATURES OF AN  
IMAGE SEQUENCE"

Assistant Commissioner for Patents  
Washington, D.C. 20231

S I R:

Applicant herewith requests approval of the drawing changes in FIGs. 1, 2  
and 3 as shown on the drawing copies marked in red attached hereto.

Submitted by,



(Reg. 28,982)

Steven H. Noll  
HILL & SIMPSON  
A Professional Corporation  
85<sup>th</sup> Floor - Sears Tower  
Chicago, Illinois 60606  
Telephone: 312/876-0200 - Ext. 3899  
Attorneys for Applicant(s)

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FIG 1

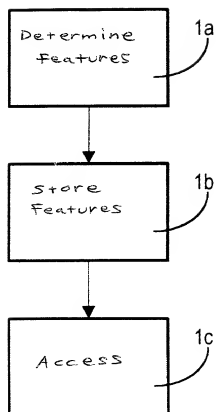


FIG 2

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FIG 2a

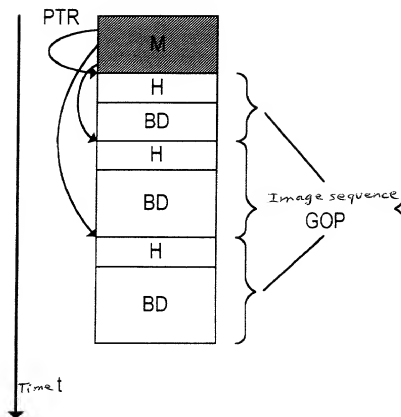


FIG 2b

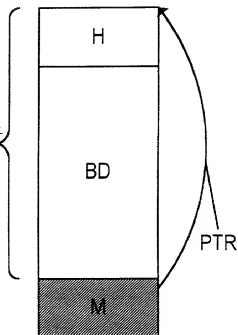


FIG 2c

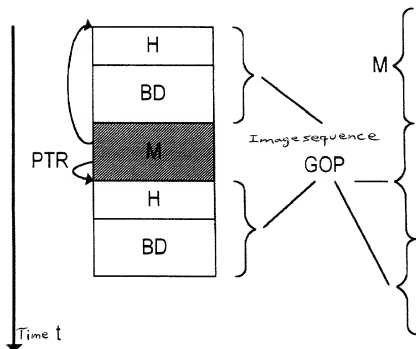


FIG 2d

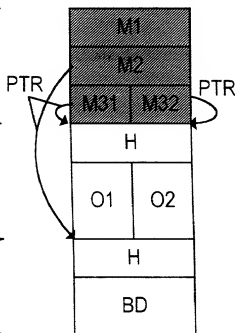
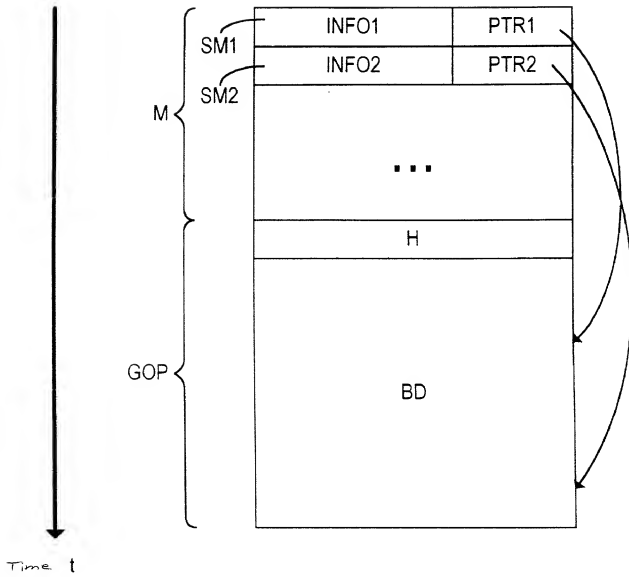


FIG 3



3/PAT.

METHOD FOR STORING SEARCH FEATURES OF AN IMAGE SEQUENCE

5 The invention relates to a method for storing search features of an image sequence and to an accessing of the image sequence with the aid of the search features.

Today, audiovisual information (image sequences) of all kinds is stored in digitized form at various locations. In order to use this audiovisual information, it is necessary to find the relevant data first.

10 The MPEG standards of image compression have long been known to the person skilled in the art.

15 First, to define specific terms used herein: An image sequence designates a series of related images. An image scene is a real subset of an image sequence and is initiated by an intrimage that is defined in MPEG or ITU, respectively.

20 The object of the invention is to set forth a method for storing search features of an image sequence/image scene and to make it possible to access this image sequence/image scene via these search features.

This object is achieved according to the features of patent claim 1.

25 The method makes it possible to store search features of an image sequence and to access the image sequence with the aid of the search features, said search features being determined from the image sequence. The search features are stored together with the image sequence. The image sequence is accessed in the event that a predetermined item of information is contained in the search features.

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A development of the invention consists in the search features being audio data and/or video data of the image sequence.

- Another development consists in the ability to access an image within the image sequence with the aid of the search features, which in turn contain a reference (a pointer) on their part.

- The access can be accomplished in that the reference is offset in time within the image sequence and thereby references the image. Access to the image is thus guaranteed.
- 10 The reference addresses the image and with this a beginning within the image sequence.

- In a further development, it is possible to prefix search features to the image sequence, to append them to one end of the image sequence, or to store them within the image sequence. This is preferably accomplished with the aid of an intrainage that is defined in MPEG or ITU, which initiates an image scene and to which the search features can be prefixed. Several image scenes with a respective intrainage can be contained within the image sequence.
- 15
- 20 Another development consists in storing each individual image scene in a database and thus guaranteeing access to the image scene.

- An additional development consists in storing separate search features in the image sequence for individual objects that are defined according to the MPEG or ITU standard, respectively. It is possible in this way to offer entry points that are related to such objects and linked to the search features.
- 25

Another development consists in unambiguously identifying the search features using a predetermined start code (header).

Since the search features are stored together with the image sequence, a comprehensive image database can be compiled from individual image sequences such as this. On the other hand, a global, preferably external, reference list containing the search features and corresponding references to the image sequence complicates a modular construction of the image sequence (above all when this consists of several image sequences that are to be exported to other databases individually).

Further developments of the invention also derive from the dependent claims.

Exemplifying embodiments of the invention are detailed with the aid of the Figures.

Shown are:

Figure 1 a block diagram illustrating a method for storing search features of an image sequence and illustrating an accessing of the image sequence with the aid of the search features,

Figure 2 various possibilities for the common storing of search features with the image sequence,

Figure 3 a sketch illustrating the search features and appertaining references that dereference [sic] the image data.

In step 1a of Figure 1, search features are determined from the image sequence. To this end, images are sought that correspond to a given pattern image completely or in parts. This is achieved in that the pattern image is first analyzed with respect to predetermined features, particularly the predominant color or typical shapes that occur. These features are stored in a database and referenced with a pointer indicating the image material that is to be referenced; that is, the found pattern image within the image sequence. The search features are stored together with the image sequence in a step 1b. Finally, it becomes possible to access the image sequence with the aid of the search features in a step 1c in that a predeterminable feature is compared to the search



features, and, if agreement was found [sic], the procedure skips to the image sequence within the image sequence referenced by the search features.

- It should be noted that it is not only possible to reference video data, exclusively, but  
 5 that pointers indicating audio data can also be stored just as well.

In Figure 2 various possibilities for storing search features together with the image sequence are illustrated.

- 10 Figure 2a depicts an image sequence GOP (Group of Pictures, as defined in MPEG standards), containing a header H and image information BE. A time axis  $t$  running vertically from the top down applies to all Figures 2a to 2b. This indicates that the time characteristic is a time characteristic of an image series that is stored as an image sequence.

- 15 In Figure 2a search features M are prefixed to the image sequence GOP. The search features M are preferably stored in a form that can be read easily as a list in plaintext (ASCII code). Long lists of search features can also be stored compressed. A pointer PTR indicating an image in the image sequence is connected to each individual search  
 20 feature, whereby this image indicates the beginning of an image series within the image sequence, which series is linked to the search feature.

In Figures 2a to 2d such references (pointers) are represented as arrows PTR.

- 25 In Figure 2b, the search features M are affixed behind the image sequence GOP. Otherwise the same applies here as in Figure 2a.

As illustrated in Figure 2c, the search features M can be stored within an image sequence GOP. Accordingly, references PTR that are linked to the search features M

must refer to image information before the search features  $M$  (above the search features  $M$  in Figure 2c) or to image information after the search features  $M$  (below the search features in Figure 2c) in terms of time.

- 5 Finally, Figure 2d depicts the coding of individual objects (audio objects and/or video objects) that is possible according to the MPEG or ITU standards, respectively. For this purpose, separate search feature sets  $M31$  and  $M32$  to each object 01 and 02 are supplemented. [sic] An audiovisual scene can contain several sets of search features  $M1$ ,  $M2$ ,  $M31$  and  $M32$ .

10

In Figure 2d the search feature sets  $M1$  and  $M2$  relate to image data  $BD$  generally, whereas the search feature sets  $M31$  and  $M32$  respectively contain search features whose entries (references) within the image series which are divided according to objects 01 and 02 refer to corresponding locations that are to be referenced.

15

Figure 3 depicts an organization of a list of search features and their relation to the image data  $BD$ . The vertical course of a time axis  $t$  from the top down again applies. The search features  $M$  in the form of a list are prefixed to the image sequence  $GOP$  containing the header  $H$  and the image data  $BD$ . The list contains several search features  $SM1$  and  $SM2$ . Each search feature respectively comprises a descriptive component  $INFO1$  and  $INFO2$  and a respective reference (pointer)  $PTR1$  and  $PTR2$  indicating an image within the image data  $BD$ .

20

- As described above, for an image sequence that is compressed according to the MPEG standard, the list can be logically subdivided so that specific search features  $S_m$  result with respect to predeterminable objects within the image sequence that is compressed according to the MPEG standard. [sic] To differentiate two objects, every second search feature  $SM_{2i}$  is allocated to a first object, and the other search feature  $SM_{(2i+1)}$  is

25

allocated to a second object ( $i=0,1,2,3,\dots$ ). Accordingly, different search feature sets can be created for several objects within the same image sequence.

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## Patent Claims

1. Method for storing search features of an image sequence,

a) in which the search features are determined from the image sequence,

5 b) in which the search features are stored together with the image sequence,

2. Method as claimed in claim 1,

in which the search features are audio data and/or video data of the image sequence.

10 3. Method as claimed in claim 1 or 2,

in which, for a purposeful access within the image sequence, the search features  
contain a reference to an image within the image sequence.

4. Method as claimed in one of the claims 1 to 3,

15 in which the search features are prefixed to the image sequence.

5. Method as claimed in one of the claims 1 to 3,

in which the search features are appended to the image sequence.

20 6. Method as claimed in one of the claims 1 to 3,

in which the search features are stored in the image sequence.

7. Method as claimed in claim 6,

in which the search features for an image scene that is initiated by an intrainage that  
25 is defined according to the MPEG standard are prefixed to the intrainage.

8. Method as claimed in claim 7,

in which every image scene is stored in a database.

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001210.1229460

9. Method as claimed in one of the preceding claims,  
in which, for several objects that are contained in the image sequence according to  
image coding standards, separate search features for the several objects are  
respectively stored with the image sequence.

5

10. Method as claimed in one of the preceding claims,  
in which the search features can be unambiguously identified by a predeterminable  
start code (HEADER).

10

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## Abstract

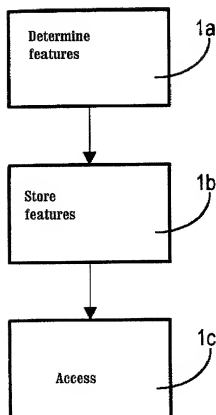
### Method for storing search features of an image sequence

- 5 For access to an image sequence comprising individual search features, these search features are correspondingly stored in the image sequence. To this end, a list of search features, which are preferably in plaintext, is prefixed to the image sequence, [...]
- 10 [...] stored behind the image sequence or in the image sequence. Besides an information entry, each search feature comprises a reference to an image within the image sequence. Access is guaranteed via the individual search features.

Figure 1

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FIG 1



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FIG 2

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FIG 2a

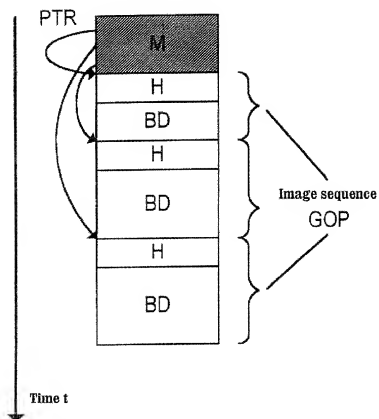


FIG 2b

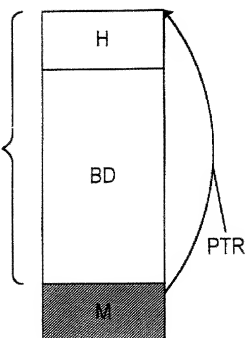


FIG 2c

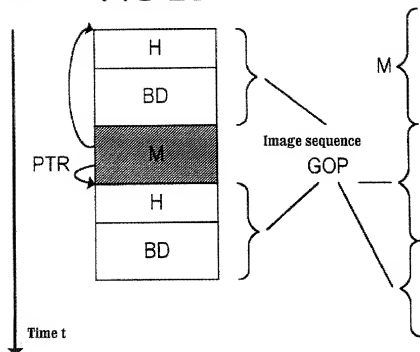
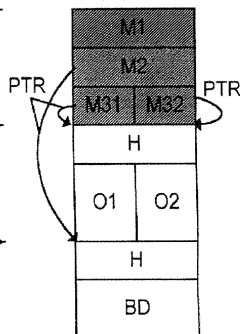


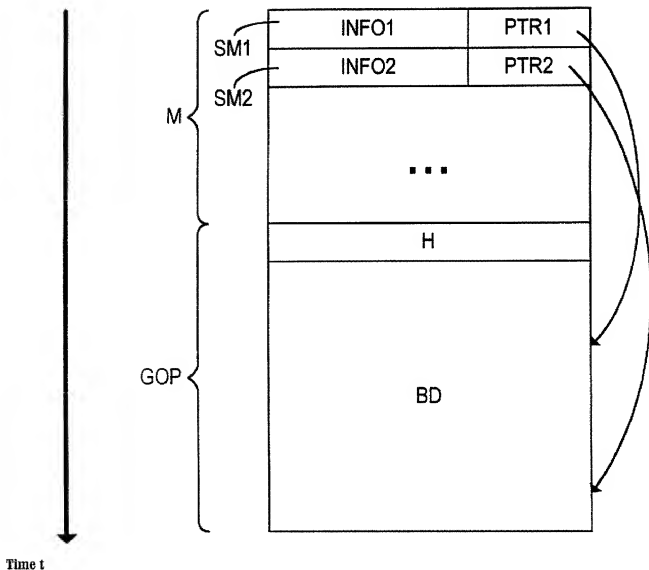
FIG 2d





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FIG 3



# Declaration and Power of Attorney For Patent Application

## Erklärung Für Patentanmeldungen Mit Vollmacht

### German Language Declaration

Als nachstehend benannter Erfinder erkläre ich hiermit an Eides Statt:

dass mein Wohnsitz, meine Postanschrift, und meine Staatsangehörigkeit den im Nachstehenden nach meinem Namen aufgeführten Angaben entsprechen,

dass ich, nach bestem Wissen der ursprüngliche, erste und alleinige Erfinder (falls nachstehend nur ein Name angegeben ist) oder ein ursprünglicher, erster und Miterfinder (falls nachstehend mehrere Namen aufgeführt sind) des Gegenstandes bin, für den dieser Antrag gestellt wird und für den ein Patent beantragt wird für die Erfindung mit dem Titel:

Verfahren zum Abspeichern von  
Suchmerkmalen einer Bildsequenz

deren Beschreibung

(zutreffendes ankreuzen)

☒ hier beigefügt ist.

☐ am \_\_\_\_\_ als

PCT internationale Anmeldung

PCT Anmeldungsnummer \_\_\_\_\_

eingereicht wurde und am \_\_\_\_\_

abgeändert wurde (falls tatsächlich abgeändert).

Ich bestätige hiermit, dass ich den Inhalt der obigen Patentanmeldung einschliesslich der Ansprüche durchgesehen und verstanden habe, die eventuell durch einen Zusatzantrag wie oben erwähnt abgeändert wurde.

Ich erkenne meine Pflicht zur Offenbarung irgendwelcher Informationen, die für die Prüfung der vorliegenden Anmeldung in Einklang mit Absatz 37, Bundesgesetzbuch, Paragraph 1.56(a) von Wichtigkeit sind, an.

Ich beanspruche hiermit ausländische Prioritätsvorteile gemäss Abschnitt 35 der Zivilprozessordnung der Vereinigten Staaten, Paragraph 119 aller unten angegebenen Auslandsanmeldungen für ein Patent oder eine Erfindersurkunde, und habe auch alle Auslandsanmeldungen für ein Patent oder eine Erfindersurkunde nachstehend gekennzeichnet, die ein Anmeldedatum haben, das vor dem Anmeldedatum der Anmeldung liegt, für die Priorität beansprucht wird.

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name,

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled

the specification of which

(check one)

☐ is attached hereto.

☐ was filed on \_\_\_\_\_ as

PCT international application

PCT Application No \_\_\_\_\_

and was amended on \_\_\_\_\_

(if applicable)

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to the examination of this application in accordance with Title 37, Code of Federal Regulations, §1.56(a).

I hereby claim foreign priority benefits under Title 35, United States Code, §119 of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed.

09463271-012400

# German Language Declaration

Prior foreign applications  
Priorität beansprucht

Priority Claimed

197 31 719.7 Germany 23. Juli 1997  
(Number) (Country) (Day Month Year Filed)  
(Nummer) (Land) (Tag Monat Jahr eingereicht)

☒ ☐  
Yes No  
Ja Nein

(Number) (Country) (Day Month Year Filed)  
(Nummer) (Land) (Tag Monat Jahr eingereicht)

☐ ☐  
Yes No  
Ja Nein

(Number) (Country) (Day Month Year Filed)  
(Nummer) (Land) (Tag Monat Jahr eingereicht)

☐ ☐  
Yes No  
Ja Nein

Ich beanspruche hiermit gemäss Absatz 35 der Zivilprozessordnung der Vereinigten Staaten, Paragraph 120, den Vorzug aller unten aufgeführten Anmeldungen und falls der Gegenstand aus jedem Anspruch dieser Anmeldung nicht in einer früheren amerikanischen Patentanmeldung laut dem ersten Paragraphen des Absatzes 35 der Zivilprozessordnung der Vereinigten Staaten, Paragraph 122 offenbart ist, erkenne ich gemäss Absatz 37, Bundesgesetzbuch, Paragraph 1.56(a) meine Pflicht zur Offenbarung von Informationen an, die zwischen dem Anmeldedatum der früheren Anmeldung und dem nationalen oder PCT internationalen Anmeldedatum dieser Anmeldung bekannt geworden sind.

I hereby claim the benefit under Title 35, United States Code, §120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code, §122, I acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations, §1.56(a) which occurred between the filing date of the prior application and the national or PCT international filing date of this application.

(Application Serial No.)  
(Anmeldeserienummer)

(Filing Date)  
(Anmeldedatum)

(Status)  
(patentiert, anhängig,  
aufgegeben)

(Status)  
(patented, pending,  
abandoned)

(Application Serial No.)  
(Anmeldeserienummer)

(Filing Date)  
(Anmeldedatum)

(Status)  
(patentiert, anhängig,  
aufgeben)

(Status)  
(patented, pending,  
abandoned)

Ich erkläre hiermit, dass alle von mir in der vorliegenden Erklärung gemachten Angaben nach meinem besten Wissen und Gewissen der vollen Wahrheit entsprechen, und dass ich diese eidesstattliche Erklärung in Kenntnis dessen abgebe, dass wissentlich und vorsätzlich falsche Angaben gemäss Paragraph 1001, Absatz 18 der Zivilprozessordnung der Vereinigten Staaten von Amerika mit Geldstrafe belegt und/oder Gefängnis bestraft werden können, und dass derartig wissentlich und vorsätzlich falsche Angaben die Gültigkeit der vorliegenden Patentanmeldung oder eines darauf erteilten Patentes gefährden können.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true, and further that these statements were made with the knowledge that wilful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such wilful false statements may jeopardize the validity of the application or any patent issued thereon.

09463271-012400

# German Language Declaration

VERTRETUNGSVOLLMACHT: Als benannter Erfinder beauftrage ich hiermit den nachstehend benannten Patentanwalt (oder die nachstehend benannten Patentanwälte) und/oder Patent-Agenten mit der Verfolgung der vorliegenden Patentanmeldung sowie mit der Abwicklung aller damit verbundenen Geschäfte vor dem Patent- und Warenzeichenamt: (Name und Registrationsnummer anführen)

POWER OF ATTORNEY: As a named inventor, I hereby appoint the following attorney(s) and/or agent(s) to prosecute this application and transact all business in the Patent and Trademark Office connected therewith. (list name and registration number)

And I hereby appoint

Messrs. John D. Simpson (Registration No. 19,642), Lewis T. Steadman (17,074), William C. Stueber (16,453), P. Phillips Connor (19,259), Dennis A. Gross (24,410), Marvin Moody (16,549), Steven H. Noll (28,982), Brett A. Valiquet (27,841), Thomas I. Ross (29,275), Kevin W. Guyard (29,927), Edward A. Lehmann (22,312), James D. Hobarf (24,149), Robert M. Barrett (30,142), James Van Santen (16,584), J. Arthur Gross (13,615), Richard J. Schwarz (13,472) and Melvin A. Robinson (31,870), David R. Metzger (32,919), John R. Garrett (27,888) all members of the firm of Hill, Steadman & Simpson, A Professional Corporation.

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Voller Name des einzigen oder ursprünglichen Erfinders:		Full name of sole or first inventor:	
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Unterschrift des Erfinders	Datum	Inventor's signature	Date
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Bundesrepublik Deutschland			
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D-85635 Höhenkirchen			
Bundesrepublik Deutschland			
Voller Name des zweiten Miterfinders (falls zutreffend):		Full name of second joint inventor, if any:	
Unterschrift des Erfinders	Datum	Second Inventor's signature	Date
Wohnsitz		Residence	
Staatsangehörigkeit		Citizenship	
Postanschrift		Post Office Address	

(Bitte entsprechende Informationen und Unterschriften im Falle von dritten und weiteren Miterfindern angeben).

(Supply similar information and signature for third and subsequent joint inventors).